

Docket No. F-7987

Ser. No. 10/673,780

**AMENDMENTS TO THE CLAIMS:**

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1-18. (Cancelled)

19. (New) A motor comprising:

a base assembly including:

a base plate;

a shaft fixed to said base plate;

a coil fixed to said base plate and configured as cylindrically shaped continuous waveform coil which is coreless;

a hub assembly including:

a hub member covering an upper part of said shaft;

a sleeve fixed to said hub member and surrounding an outer circumference of said shaft to define a gas volume separating said sleeve and said shaft;

a rotor fixed to said hub member and including a plurality of magnets cylindrically arranged; and

Docket No. F-7987

Ser. No. 10/673,780

a back yoke fixedly connected to said rotor via said hub member and arranged in fixed opposition to said rotor with said coil disposed between said back yoke and said rotor so as to define a magnetic circuit outside said sleeve and said shaft;

said sleeve and said shaft being configured to form a radial aerodynamic bearing; and

first and second magnets respectively connected to said sleeve and said shaft and configured to form an axial thrust bearing.

20. (New) The motor of claim 19 wherein said rotor is disposed radially inward of said coil and said back yoke is disposed radially outward of said coil.

21. (New) The motor of claim 20 wherein said first magnet is disposed in a concavity of an inside surface of a top portion of said hub member above said upper part of said shaft and said second magnet is fixed to said upper part of said shaft and disposed within said concavity to oppose said first magnet and interact therewith to provide axial thrust supporting said hub member, said first and second magnets being closed within said concavity by said radial aerodynamic bearing.

Docket No. F-7987

Ser. No. 10/673,780

22. (New) The motor of claim 21 wherein said hub member has a color wheel fixedly connected to said hub member.

23. (New) The motor of claim 21 wherein said first and second magnets are concentric, radially opposing one another, and provide axial thrust by attraction.

24. (New) The motor of claim 19 wherein said rotor is disposed radially outward of said coil and said back yoke is disposed radially inward of said coil.

25. (New) The motor of claim 24 wherein said first magnet is disposed in a concavity of an inside surface of a top portion of said hub member above said upper part of said shaft and said second magnet is fixed to said upper part of said shaft and disposed within said concavity to oppose said first magnet and interact therewith to provide axial thrust supporting said hub member, said first and second magnets being closed within said concavity by said radial aerodynamic bearing.

26. (New) The motor of claim 25 wherein said hub member has a color wheel fixedly connected to said hub member.

Docket No. F-7987

Ser. No. 10/673,780

27. (New) The motor of claim 25 wherein said first and second magnets are concentric, radially opposing one another, and provide axial thrust by attraction.

28. (New) A motor comprising:

a base assembly including:

a base plate;

a sleeve fixed to said base plate;

a coil fixed to said base plate and configured as cylindrically shaped continuous waveform coil which is coreless;

a hub assembly including:

a hub member covering an upper part of said shaft;

a shaft having an upper end fixed to said hub member and having an outer circumference thereof surrounded by said sleeve to define a gas volume separating said sleeve and said shaft;

a rotor fixed to said hub member and including a plurality of magnets cylindrically arranged; and

a back yoke fixedly connected to said rotor via said hub member and arranged in fixed opposition to said rotor with said coil

Docket No. F-7987

Ser. No. 10/673,780

disposed between said back yoke and said rotor so as to define a magnetic circuit outside said sleeve and said shaft;

said sleeve and said shaft being configured to form a radial acrodynamic bearing; and

first and second magnets respectively connected to said sleeve and said shaft and configured to form an axial thrust bearing.

29. (New) The motor of claim 28 wherein said rotor is disposed radially inward of said coil and said back yoke is disposed radially outward of said coil.

30. (New) The motor of claim 29 wherein said first and second magnets are arranged at a lower end of said shaft, said first magnet is disposed in an annular recess in an interior bottom portion of said sleeve and said second magnet is fixed to a bottom of said shaft.

31. (New) The motor of claim 30 wherein said hub member has a color wheel fixedly connected to said hub member.

Docket No. F-7987

Scr. No. 10/673,780

32. (New) The motor of claim 30 wherein said first and second magnets are concentric, radially opposing one another, and provide axial thrust by attraction.

33. (New) The motor of claim 28 wherein said rotor is disposed radially outward of said coil and said back yoke is disposed radially inward of said coil.

34. (New) The motor of claim 33 wherein said first and second magnets are arranged at a lower end of said shaft, said first magnet is disposed in an annular recess in an interior bottom portion of said sleeve and said second magnet is fixed to a bottom of said shaft.

35. (New) The motor of claim 34 wherein said hub member has a color wheel fixedly connected to said hub member.

36. (New) The motor of claim 34 wherein said first and second magnets are concentric, radially opposing one another, and provide axial thrust by attraction.